AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method for reducing <u>central processing unit (CPU)</u> loading ~~in a software receiver for a packet based communications system~~, the method comprising ~~the steps of~~:

measuring ~~the~~ <u>a</u> current CPU load by measuring an interrupt latency;

determining ~~whether~~ <u>that</u> the <u>current</u> CPU load ~~has exceeded~~ <u>exceeds</u> a predetermined threshold;

responsive to determining that the <u>current</u> CPU <u>load</u> ~~has~~ exceeded [[a]] <u>the</u> predetermined threshold, entering a power save mode by setting a Power Save (PS) bit in a frame control word, thereby signaling ~~the~~ <u>a</u> communications system transmitter to inhibit packet transmission and packet reception;

monitoring ~~the~~ CPU load while the <u>communication system</u> transmitter is inhibited;

determining that the <u>monitored</u> CPU load ~~has fallen~~ <u>is</u> below [[a]] <u>the</u> predetermined threshold; and

<u>responsive to determining that the monitored CPU load is below the predetermined threshold,</u> signaling the communications system transmitter to begin transmitting packets ~~once the CPU load has fallen below the predetermined threshold~~, wherein the signaling clears the PS bit.

2. (Currently Amended) <u>The method of</u> ~~A method as in~~ claim 1, wherein <u>monitoring the CPU load is performed</u> ~~the measurement of CPU loading is made~~ by an operating system background task.

3. (Canceled)

4. (Currently Amended)   <u>The method of</u> ~~A method as in~~ claim 1, <u>further comprising</u> ~~wherein the transmitter~~ signaling <u>the communication system transmitter to transmit a frame</u> ~~is performed~~ during the power save mode.

5. (Currently Amended)   The method of ~~A method as in~~ claim 1, in which the communications system is wireless.

6. (Currently Amended)   The method of ~~A method as in~~ claim 1, in which the communications system is IEEE 802.11 wireless local area network (WLAN).

7. (Currently Amended)   The method of ~~A method as in~~ claim 1, in which the communication system is Bluetooth.

8. (Currently Amended)   The method of ~~A method as in~~ claim 1, in which the communications system is IEEE 802.15 wireless personal area network (PAN).

9-14.   (Cancelled)

15.   (Currently Amended) An apparatus, ~~for reducing CPU loading in a software receiver for a packet based communications system~~ comprising:

a processor configured with digital logic configured to:

measure ~~the~~ a current central processor unit (CPU) ~~CPU~~ load by measuring the response time of the CPU to a request for processor time;

determine ~~whether~~ that the current CPU load exceeds ~~has exceeded~~ a predetermined threshold;

responsive to determining that the current CPU load ~~has~~ exceeded ~~a~~ the predetermined threshold, enter a power save mode by setting a Power Save (PS) bit in a frame control word, thereby signaling ~~the~~ a communications system transmitter to inhibit packet transmission and packet reception;

monitor ~~the~~ CPU load while the communication system transmitter is inhibited;

determine ~~whether~~ that the monitored CPU load ~~has fallen~~ is below [[a]] the predetermined threshold; and

responsive to determining that the monitored CPU load is below the predetermined threshold, signal the communications system transmitter to begin

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transmitting packets ~~once the CPU load has fallen below the predetermined threshold~~, wherein the signaling clears the PS bit.

16. (Currently Amended)   The apparatus of claim 15, wherein <u>monitoring the CPU load is performed by</u> ~~the measurement of CPU loading is~~ a background task.

17. (Currently Amended) The apparatus of claim 15, wherein the <u>current</u> CPU load measurement is based on the response time of a host CPU to a request for interrupt.

18. (Currently Amended) The apparatus of claim 15, wherein the <u>processor is further configured to signal the communications system</u> transmitter <u>to transmit a frame</u> ~~signaling is performed~~ during the power save mode.

19. (Previously Presented)   The apparatus of claim 15, wherein the communications system is wireless.

20. (Previously Presented)   The apparatus of claim 15, wherein the communications system is at least one of: an IEEE 802.11 wireless local area network (WLAN); a Bluetooth system; and an IEEE 802.15 wireless personal area network (PAN).

21. (Currently Amended)   A system<u>,</u> ~~for reducing CPU loading in a software receiver for a packet-based communications system comprising a processing means~~ comprising:
means for measuring ~~the~~ <u>a</u> current <u>central processor unit (CPU)</u> ~~CPU~~ load by measuring an interrupt latency;
means for determining ~~whether~~ <u>that</u> the <u>current</u> CPU load ~~has exceeded~~ <u>exceeds</u> a predetermined threshold;
means for, responsive to determining that the <u>current</u> CPU <u>load</u> ~~has~~ exceeded ~~a~~ <u>the</u> predetermined threshold, entering a power save mode by setting a Power Save (PS) bit in a frame control word, thereby signaling ~~the~~ <u>a</u> communications system transmitter to inhibit packet transmission and packet reception;

means for monitoring the CPU load while the <u>communication system</u> transmitter is inhibited;

means for determining that the <u>monitored</u> CPU load <s>has fallen</s> <u>is</u> below [[a]] <u>the</u> predetermined threshold; and

means for<u>, responsive to determining that the monitored CPU load is below the predetermined threshold,</u> signaling the communications system transmitter to begin transmitting packets <s>once the CPU load has fallen below the predetermined threshold</s>, wherein the signaling clears the PS bit.

22. (Previously Presented)   The system of claim 21, wherein the <u>monitoring the CPU load is performed by</u> <s>measurement of CPU loading is made as</s> a background task.

23. (Canceled)

24. (Currently Amended) The system of claim 21, <s>wherein the transmitter</s> <u>further comprising means for</u> signaling <u>the communications system transmitter to transmit a frame</u> <s>is performed</s> during the power save mode.

25. (Previously Presented) The system of claim 21, wherein the communications system is wireless.

26. (Previously Presented) The system of claim 21, wherein the communications system is at least one of: an IEEE 802.11 wireless local area network (WLAN); a Bluetooth system; and an IEEE 802.15 wireless personal area network (PAN).